

WHAT IS CLAIMED IS

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1. An AT-command analyzing device,  
comprising:

a transmitting and receiving portion which  
receives asynchronous transmission serial data based on  
10 a baud-rate clock from a DTE;

a control portion which analyzes the data  
received by said transmitting and receiving portion;

a baud-rate generating portion which generates  
the baud-rate clock to be output to said transmitting  
15 and receiving portion in accordance with instructions  
from said control portion;

a measuring portion which measures the span of  
the start bit of the first character of an AT command  
transmitted from said DTE based on instructions from  
20 said control portion;

a rate analyzing portion which receives a  
measurement result of said measuring portion, outputs  
frequency-dividing data for producing a clock for  
sampling the first character, and also outputs, when the  
25 rate of the start bit is more than a preset value, a

flag indicating this matter;

a sampling-clock generating portion which selects, in accordance with whether or not said flag is has been set, the frequency-dividing data from either  
5 said rate analyzing portion or said control portion, and produces the sampling clock; and

a shift-register portion which receives data subsequent to the start bit of the first character based on the sampling clock from said sampling-clock  
10 generating portion, and holds the received data, which data is then read by said control portion.

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2. The AT-command analyzing device as claimed in claim 1, wherein said shift-register portion checks, each time when sampling a bit, whether or not the first character is 'A' or 'a' which corresponds to 41H or 61H  
20 in hexadecimal notation, and, when determining that the first character is neither 'A' nor 'a', stops the sampling operation and outputs a flag indicating an error to said control means.

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3. The AT-command analyzing device as claimed  
in claim 1, wherein said shift-register portion stops a  
sampling operation when, before sampling a bit  
subsequent to the start bit, the level of the received  
5 data of said bit subsequent to the start bit changes  
from high to low, and outputs a flag indicating an error  
to said control means.

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4. The AT-command analyzing device as claimed  
in claim 1, wherein said shift-register portion attempts  
to sample, after sampling the 8 bits subsequent to the  
15 start bit, the following stop bit, and, when being not  
able to detect the stop bit, outputs a flag indicating  
an error to said control means.

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5. The AT-command analyzing device as claimed  
in claim 1, wherein said sampling-clock generating  
portion can operate in a one-shot-pulse outputting  
25 operation mode other than a sampling-clock generating

mode, whether said sampling-clock generating portion  
operates in said one-shot-pulse outputting operation  
mode or said sampling-clock generating mode can be  
determined in accordance with instructions from said  
5 control portion, and said sampling-clock generating  
portion can output a one-shot pulse as an interrupt  
signal of said control portion in said one-shot-pulse  
outputting operation mode.

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